



IFWP

RAW SEQUENCE LISTING

DATE: 07/25/2006

PATENT APPLICATION: US/10/551,492

TIME: 15:59:20

Input Set : N:\AMC\551492.txt

Output Set : N:\CRF4\07252006\J551492.raw

```

3 <110> APPLICANT: MEINKE, ANDREAS
4     MIN BUI, DUC
5     NAGY, ESZTER
7 <120> TITLE OF INVENTION: S. Epidermidis Antigens
9 <130> FILE REFERENCE: SONN:078US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/551,492
12 <141> CURRENT FILING DATE: 2005-09-30
14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/003398
15 <151> PRIOR FILING DATE: 2004-03-31
17 <150> PRIOR APPLICATION NUMBER: EP03450078.5
18 <151> PRIOR FILING DATE: 2003-03-31
20 <160> NUMBER OF SEQ ID NOS: 64
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 2028
26 <212> TYPE: DNA
27 <213> ORGANISM: Staphylococcus epidermidis
29 <400> SEQUENCE: 1
30 atgaagagaa cagataaaat tgggtgtctac ctcaagctgt catgttctgc gttgttactt      60
32 agtgggttcgc tgggttggtta tggcttcaca aaagatgctt ttgcagattc agaaagtaca      120
34 tcatcaaagtg ttgaaaatac ttctaatagt aactccatcg ctgacaaaat ccaacaagct      180
36 aaagatgata ttaaagattt gaaagaactt tctgacgcag atatcaaaag ttttgaagaa      240
38 cgttttagata aagtcgataa tcaatcaagt attgaccgta ttataaatga tgcaaaagat      300
40 aaaaataatc atttaaaatc gacagactct agtgccacat catcaaaaac tgaagatgac      360
42 gatacatctg aaaaagataa tgatgatatg actaaagact tagataaaat actgtcggat      420
44 ttagattcaa ttgctaaaaa tgttgataac cgtcaacaag gtgaagagag agcttctaaa      480
46 cctagtgcact caacaaccga tgaaaaagat gattcaaata ataaagtaca cgatacaaat      540
48 gctagtacac gtaatgcaac tactgatgat tctgaagagt cggttattga taaattagat      600
50 aaaatccaac aagattttta atctgactct aataataatc cttctgaaca aagcgatcag      660
52 caagcatcac catcttaata aaccgaaaaa agtaataatg aatctagtac gacaacaaat      720
54 caatccgata gtgatagtaa agacgataaa agtaatgatg gtcacgctc aacattagaa      780
56 cgtatagcat cagatactga tcaaattagg gattcaaaag atcaacatgt cacagatgaa      840
58 aaacaagata tacaagcaat tacacgttca ttacaaggta gtgataagat tgaaaaagca      900
60 cttgctaagg tacaatctga caatcaatca ctagattcta attatataaa taataaatta      960
62 atgaatttaa gatcactaga tacaaaagta gaggataata acactttatc tgatgataag      1020
64 aaacaagcgc ttaaaacaaga aattgataag actaagcaaa gtattgaccg acaagaaat      1080
66 attattatag atcaactcaa tgggtgctag aataaaaaaac aagcaaccga agatatctta      1140
68 aatagtgttt ttagcaaaaaa tgaagtagaa gacataatga aacgtattaa aacaaatggc      1200
70 cgaagtaatg aagatatcgc taatcaaatt gccaaagcaa ttgatggctc tgcattaact      1260
72 tctagtgatg atatttttaa atcaatgtta gatcaatcta aagataaaga aagtttaatt      1320
74 aaacaattgt tgacgacacg acttggtaat gatgaagcag atcgtattgc taaaaaattg      1380
76 ttaagccaaa acttgtcgaa ttctcaaatt gtagaacaat taaaacgtca tttcaatagt      1440
78 caaggaacag ctacagctga tgatatattg aatgggtgtg ttaatgatgc taaagacaaa      1500

```

RAW SEQUENCE LISTING

DATE: 07/25/2006

PATENT APPLICATION: US/10/551,492

TIME: 15:59:20

Input Set : N:\AMC\551492.txt

Output Set: N:\CRF4\07252006\J551492.raw

```

80 agacaagcga ttgaaacaat attacaaacc cgtatcaata aagacaaagc taaaattatc 1560
82 gctgatgtta ttgcgcgtgt acaaaaggac aaatcagata tcatggatct cattcactct 1620
84 gcgattgaag gcaaggcaaa tgatttatta gatatagaaa aacgagcaaa acaagctaag 1680
86 aaagatttag aatatatttt agatcctata aagaatagac catccttggt agatcgtatt 1740
88 aacaaagggtg tcggtgattc taattcaata tttgatagac caagtttact tgataaactt 1800
90 cactcaagag gatctattct tgataaatta gatcattcgg caccggagaa tggattatct 1860
92 ttagataata aagggtggcct ttttaagtgt ctatttgacg acgatggtaa tatctcatta 1920
94 ccagcgacag gtgaagtcac caaacaacat tggataccag tggctgttgt actcatgtca 1980
96 ttaggtgggg cgctcatctt tatggcgcgt agaaaaaac accaaaa 2028
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 1965
101 <212> TYPE: DNA
102 <213> ORGANISM: Staphylococcus epidermidis
104 <400> SEQUENCE: 2
105 atgaagaaaa ataaattttt agtatattta ctatcgacgg cgcttatcac gccaaccttc 60
107 gctacacaaa cagcttttgc tgaagattca tctaataaaa atacaaattc agataaaatg 120
109 gaacaacatc aatcacaaaa agaaacatca aaacaatctg aaaaagatga atttaacaac 180
111 gatgattcta aacacgatcc tgatgataaa aaaagcactt ctgacagcaa ggacaaagac 240
113 tctaataaac cattatcagc tgattcaaca catcgtaact ataaaatgaa agatgataat 300
115 ttagttgata aactttatga taattttaag tctcagtcag tagatttttc taaatactgg 360
117 gaaccgaata aatacgaaga cagttttagt ttaacgtcac tcatccaaaa tttatttgat 420
119 tttgattctg atataacaga ttacgaacag ccacaaaaga caagccattc ttctaatagac 480
121 gaaaaagatc aagtagacca agcagatcag gcaaaacaac catcacaca tcaagaacca 540
123 tcacagtcgt ctgctaaaca agatcaagaa ccatcaaacg atgaaaaaga aaagacaact 600
125 aaccaccaag cgcattctga cgtcagtgat ttacttggag aaatggataa agaagatcaa 660
127 gaaggcgaaa acgtagatgc aaacaaaaat caatcttctt ctgagcaaca acaaaactcaa 720
129 gcgaatgatg atagctcaga acgtaacaaa aaatattcta gtattacaga ttcagcatta 780
131 gactctatat tagatgaata tagtcaggac gctaagaaaa cagaaaaaga ttacaataag 840
133 agcaagaata caagtcacac taaaacatct caaagtgata atgccgacaa aaatccacaa 900
135 ttaccaacag atgatgaatt aaaacatcaa tcaaaacctg cacaatcatt tgaggatgac 960
137 attaaacgct caaatacacg ttcaacaagt cttttccaac aactacctga attagacaat 1020
139 ggtgacttat cttctgatcc atttaatggt gttgacagtc aagacacacg tgatttcatt 1080
141 caatcaattg ctaaaagatgc gcatcagatt ggaaaagacc aagatatata tgcatacagt 1140
143 atgattgctc aagctatttt agaactctgac tctggaaaaa gttcacttgc acaatcacca 1200
145 aatcataact tgtttggaat caaagggtgac tacaaaggac aatctgtaac ttttaatact 1260
147 ttagaagctg atagcagtaa tcatatgttt agtatccaag caggtttccg taaataacca 1320
149 agtactaaac aatctcttga agattatgca gatttaatca aacatgggat cgatggtaat 1380
151 ccgtcaattt ataaaccaac ttggaagagt gaagctctat catataaaga tgctacttca 1440
153 catctgtcac gtcataacgc cacagatcct aattattcta aaaaattaaa tagtattatt 1500
155 aaacattatc atttaacatc ttttgacaaa gaaaaaatgc ctaacatgaa gaaatataat 1560
157 aaatcaatag gtacggatgt gtctggtaat gacttcaaac catttactga aacttccggg 1620
159 acatcacctt acccacatgg ccaatgtact tggatatgtgt accaccgtat gaatcaattt 1680
161 gatgcatcca tttctggtga cttaggtgat gtcataatt ggaataaccg tgctgaaagt 1740
163 gaaggctata cggtaacgca cacacctaaa aatcatactg cagttgtgtt tgaagctggg 1800
165 caattagggt ctgatacaca gtatggatcat gttgccttcg ttgaaaaagt taatgacgac 1860
167 ggttcaattg ttatttctga atcaaagtgt aaaggattag gtgtcatttc attcagaact 1920
169 attgatgcag gagatgctca agatttagat tacattaaag gtaaa 1965
172 <210> SEQ ID NO: 3
173 <211> LENGTH: 492

```

RAW SEQUENCE LISTING

DATE: 07/25/2006

PATENT APPLICATION: US/10/551,492

TIME: 15:59:20

Input Set : N:\AMC\551492.txt

Output Set: N:\CRF4\07252006\J551492.raw

174 <212> TYPE: DNA

175 <213> ORGANISM: Staphylococcus epidermidis

177 <400> SEQUENCE: 3

178 atgattagat ttgcacgact agaagatcctt caagatatatt tgacaattta taatgatgcc	60
180 atccttaata caacagctgt ttatacgtat aagccacaac aattagatga acgtcttcaa	120
182 tggatcaat ctaaagcaaa aataaacgaa cctatatggg tttatgaaaa agaaggga	180
184 gtagttggtt ttgccactta tggttccttt agacaatggc cggcctatatt atatactatt	240
186 gaacattcta tatatgttca tcaacagtac agaggactag gtatcgcttc tcaattatta	300
188 gagaatttaa ttcgttacgc taaagaacaa ggttatcgca ccattgttgc tgggattgat	360
190 gcatcgaaca tggatagtat cgcattgcat aagaagtttg acttctcaca tgcagggtaca	420
192 attaaaaatg taggttataa atttgatcga tggctcgatt tatcatttta tcaatatgat	480
194 ttatctgatt ca	492

197 <210> SEQ ID NO: 4

198 <211> LENGTH: 2856

199 <212> TYPE: DNA

200 <213> ORGANISM: Staphylococcus epidermidis

202 <400> SEQUENCE: 4

203 ttgagtaatt tgatacaaga tattaagcaa tctttatata agggatttat agataaagat	60
205 agttcccata aaggcaattt tgttccaaga ttactagtaa ataacaaaga agaaaatgta	120
207 ctttctacta ttatagatca gctgcataat tgccaatcat tttgtatttc ggttgcattt	180
209 ataaccgaga gtgggttagc aagtctaaaa tcacattttt atgatttaag taagaaaggc	240
211 gtaaaaggaa ggataataac atcaaattac ttaggtttta atagtccgaa aatgtttgag	300
213 gaattattga aattagagaa tgtagagggt aaattaacaa acattgaggg gttccatgct	360
215 aaggggtaca tatttgaaca tcataaccac acttctttta ttataggagg ttccaattta	420
217 acttctaattg cattgaaatt gaattatgaa cataatttat ttttatctac tcataaaaaat	480
219 ggagatcttg ttaacaatat taaatataaa tttgatgaac tttgggattc tagcttttct	540
221 ttaactaatg aatggataaa tgaatataaa cagctctttg aatatcaaac attgcaaaaa	600
223 gtatttgata acactgttgt tcaaaattca gatattaaaa agtttaatga atcaaaactt	660
225 ataaaaccca atttaatgca agaacacgca ttaaagtcac tagagtcttt gagaaatgtg	720
227 ggagaagaaa aggggttaat tatatctgag acagggactg gaaaaactat tttatgcgca	780
229 cttgatgtaa gagcttattc tccagataaa tttctattta ttgttcataa tgaagggtata	840
231 ttaaatagag ctatagaaga atttaagaaa gtatttccat atgaggatga aagtaatttt	900
233 ggattattaa caggaaaacg aaaggatcat gatgctaaat tcctttttgc aacaattcaa	960
235 acactttcta aaaaggaaaa ttataaattg ttttaactcta atcattttga ctacatcggt	1020
237 tttgacgagg ctcatcgaat tgctgcacat agttatcaga aaatatattaa ttatttttaa	1080
239 cctaactttt tgctaggaat gactgcaaca ccagaaagaa ctgatgaatt aaatattttt	1140
241 gaattgttta attataatat tgcttatgaa attcgtttac aagaggcttt agagagtaat	1200
243 attttatgtc cttttcatta ttttgaggtt acagattata ttcaaaatga aatgagtcaa	1260
245 gaagatgcat ttaatctaaa atatttagca tctaataaac gtgttgaaca catcataaaa	1320
247 aagactaatt attatgggtt ttcagggtgac gttttaaagg gtttaatat tgttagtagt	1380
249 aggggtgagg cgtatcaatt agcaaaccac ttaagtaaac gtggtatatc atcggttggt	1440
251 ttgacaggaa aagattctat agcttataga gctgaaacaa ttcaacaact aaaagaagga	1500
253 tctattaatt atataattac tgtagatttg ttttaacgaag gaattgatat tcctgaaata	1560
255 aatcaagttg taatgttaag acctactaaa tcaagtatta tattttattca acagcttggt	1620
257 agaggattaa gaaaaagtac taataaagaa tttgttactg ttattgattt tatcggtaat	1680
259 tataaaacta actatatgat cccaatagcc ttatctggaa ataaatctca aaataaggat	1740
261 aattacagaa aattcttaac agatactacg gttttaaacg gtgtttcaac aataaatttt	1800
263 gaagaagtag ctaaaaataa aattttataat tcaactagatt ctgttaaat aaatcaacca	1860
265 aaattaatta aagaagcttt taacaatgta aaagaccgta taggtaaatt acctttactt	1920

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/551,492

DATE: 07/25/2006

TIME: 15:59:20

Input Set : N:\AMC\551492.txt

Output Set : N:\CRF4\07252006\J551492.raw

```

267 atggacttta taaataacga ttcgattgat ccaagtgtga ttttctcacg ttttaaaaat 1980
269 tattatgagt ttttaataaa aaataaaaatt attgagaatg aattaagtat taatgaattt 2040
271 aaaaatttaa cattttttatc aagacaatta acacctggac ttaaaaaagt agatattgat 2100
273 gtattgaaag aaattatata aaatgacgta acttatgaaa atttaacaaa aaaaatgtta 2160
275 aacattaata acgatatttc ggaatatgat attaacactt cattaagcat tttagatttt 2220
277 acttttttca aaaagactat aggtaaaaact tacggattac cttaataaca atataaggat 2280
279 aatcttattt gtctagcaaa tgaatttaaa gaggtcttaa ataaaccact atttaacaca 2340
281 tttattcatg atttaattga tcttgctaat tataataatg acagatatca aaataagaaa 2400
283 aacagtttaa ttctatataa caaatattct aggggaagatt ttgttaagtt attaaactgg 2460
285 gataaagatg aatctggaac aatcaatggt tatcgtatga aacatcgtac acttccttta 2520
287 tttatcactt atgataaaca tgagaatatc agtgataata ctaagtacga cgatgaattt 2580
289 ttgagccaag acggaattgaa atggtacacg cgggtccaac gtaaatgaac ttcaccagaa 2640
291 gtacaaaata ttttaaagca tgaagaaagt aatacagata tgtatatatt tgtgaaaaaa 2700
293 agagatgatg aagggaataa tttctactat ttaggtaaaag ccaaatatat taaaggaaact 2760
295 gagaagcaag attatatgcc taatggaaat agcgtggtaa ctatgcatct atcaatgaat 2820
297 acgtccattc gagatgatat ttatagatac atcact 2856

```

300 <210> SEQ ID NO: 5

301 <211> LENGTH: 975

302 <212> TYPE: DNA

303 <213> ORGANISM: Staphylococcus epidermidis

305 <400> SEQUENCE: 5

```

306 atgacaaaat cacaacaaaa agtgtcatca attgagaaat taagtaatca agaaggattt 60
308 atttcagctt tagcatttga tcaacgtggt gcattaaaaa gaatgatggc agaacatcaa 120
310 tctgaaacac caacagtgtg acaaatagaa caattaaaag tacttgtttc tgaagaatta 180
312 actcaatatg cgtcttcaat tttattagat ccagaatatg gtttaccagc atcagatgct 240
314 cgaaataatg actgcggaact attacttgca tacgaaaaaa ctggatatga tgtgaatgcg 300
316 aaaggtcggt tgccagattt cttggtagaa tggctgcgga aacgtttgaa agagcaaggg 360
318 gccaatgcag ttaaattttt actttattat gatgtagatg acacagaaga aattaacata 420
320 caaaagaaag catatatattg acgaattggt tcagaatgtg ttgccgaaga tattcctttc 480
322 ttcttggaag ttttaacata tgacgacaat attcctgaca ataaaagtgc agaattcgct 540
324 aaagttaagc cacgtaaagt taatgaagca atgaagttat tctctgaaga tcgttttaat 600
326 gtggatgtac ttaaagttga agtacctgtg aatatgaatt ttgtggaagg attttcagaa 660
328 ggagaagttg tttatactaa agaagaagct gcacaacatt tccgtgatca agatgcagct 720
330 actcacttac catatattta ttttaagtga ggtgtatcag cagaattggt ccaagatata 780
332 ttaaaatttg cgcattgattc tgggtgcgcaa ttcaatggtg ttttatgtgg acgtgccaca 840
334 tggtcaggag cagttaaggt atacattgaa gaaggagagc aagctgccag agaatggttg 900
336 cgtacggtag gatttaagaa tattgatgat ttgaatacag tattgaaaac aacagctaca 960
338 tcatggaaaa acaaa 975

```

341 <210> SEQ ID NO: 6

342 <211> LENGTH: 1146

343 <212> TYPE: DNA

344 <213> ORGANISM: Staphylococcus epidermidis

346 <400> SEQUENCE: 6

```

347 ttgatgaaaa aagttatgac catatttga actaggcctg aagctataaa aatggctccg 60
349 ttgattaaaa cgttagagaa agattctgac ctggaaccgg ttgttgtagt caccgcccaa 120
351 catagagaga tgcttgattc agtgttgaat acttttaaca taagtgcaga ttatgatttg 180
353 aatattatga aagctggtca aacattgtct gaagtaacat ctgaagcaat gaaaaagtta 240
355 gaagatatca taaaaagga agtgctgat atggtacttg ttcattggtg tacagtgaca 300
357 accttttctg gagcattagc cgcattttat agtcaaacac ctataggaca tgttgaagct 360

```

RAW SEQUENCE LISTING

DATE: 07/25/2006

PATENT APPLICATION: US/10/551,492

TIME: 15:59:20

Input Set : N:\AMC\551492.txt

Output Set: N:\CRF4\07252006\J551492.raw

```

359 ggattaagga gttataataa atattcacct tatcctgaag aaataaatag acaaattggtt 420
361 ggggtaaatgg cagatttgca ctttgcccca acctataatg ctgcacagaa tttagtaaaa 480
363 gagggtaaat tagccaaaca tatagctatc actggttaata cagctattga cgcaatgaat 540
365 tatacaatcg atcaccaata ttcacatctc atcatacaaa aacataaaaa taaaaacttt 600
367 attttactca cagcacatag acgtgaaaa ataggtaaac ctatgataaa cgtgtttaaa 660
369 gcgattagaa agttgatga tgaatatcag gatttagcgt tgggtctatcc tatgcatatg 720
371 aatcccaaag taagagatat tgcgcaaaaa tatttaggaa atcatcctag gattgaattg 780
373 atagaaccac ttgatgtggt tgattttcat aattttgcta aacaagcata tctcattatg 840
375 actgactctg gtggaataca agaggaggca ccatcattac acaaaccagt tttagtattg 900
377 agagatagta ctgaaagacc ggaggagta gatgctggaa ctttgagagt catttggtacg 960
379 aatgaagaag atgtctataa tgaaactaaa aaattaatag aaaaccaga cctttatcaa 1020
381 aaaatgagtc aagctgttaa tccatatggc gatggacaag ctagtggag aattgtgcaa 1080
383 catataaat attattttaa tttgacaaat gacagacca atcattttga atttacaaaa 1140
385 gattta 1146
388 <210> SEQ ID NO: 7
389 <211> LENGTH: 8271
390 <212> TYPE: DNA
391 <213> ORGANISM: Staphylococcus epidermidis
393 <400> SEQUENCE: 7
394 gtggcaagtg attttaatat aggtatatta tctaccttag agatagactc tagctcctca 60
396 agaaagaaga ttaacgacac acttaaaaa attgaaagcaa atattaatag cattaagca 120
398 gacttagaag tttagatcac aaagaaatca gaaaataatg ctataaaaag tgcaaacac 180
400 gtaatcagaa acatcaattc aaacggtaat ttaagaaat taaatgttga actagatgta 240
402 aacttaacaa aaagtagaca aaacattcaa agagcattat ctactctatc aaaagatttt 300
404 aagaataaga aaattgatgt tgaagttaat gctaaagcta ataaaaattc aatcggacaa 360
406 gttaagaatt ctatttctaa aggtgcaagt cagccactag aaattaaaga gtcccctagt 420
408 agtagaagca ctatgagaga tattaagaa cagcagctct taatgacagg tttagcaaat 480
410 tcttataaga acttagatga tttacaaaga gctttaaata caagtacatt tgaagggctt 540
412 agaaaaactg taaaagaaat taagaacgca gataattctc ttaaaagtta tcaagttact 600
414 ttagaacgtg ttaaccaaga aggtaaaaaa ttaggctctc aaagatttga ttataccctt 660
416 tctgcaaatg gtttgaaagt aaacaaaact caattaactg atcaaacaga taaagctcgt 720
418 aaagaagaaa atgctgctat taataaatta ttagaaaatg aagtttctaa gtatgatcgt 780
420 ttattgaata aaggtaaaat tgatattaaa caacatcaaa ctttacttca aactcttaga 840
422 caaattacta atgagaaatc aaaagctaac caatttaata gaactgattt caatagagta 900
424 gcaaaaagctg ctgctgatga agcaaaaaga tatcaatatc aaaatgatat gcttcgaaag 960
426 aaattagctt taacttctca aattgagcgt attgaaaaca gaatggctgc tacaattgat 1020
428 aagcaacaaa caaatgcttt gaaaaatcaa ttgaattctt taggtaataa tagaacacca 1080
430 ttcggtaaag aagcagcttt ccatatgaac caaattcaag acaagggttcg tcaaatctct 1140
432 gctgaagctg aaagagcaac tagaactcag ttaagttttg ttgatcaatt cagagaagca 1200
434 atgacaaaat tcccagtttg gatgggtgct actaccctat tcttcggtgc cataaatggt 1260
436 gctaaagaaa tgcttgatgt aattactgaa attgatggaa aaatgattac tcttgcaaaa 1320
438 gttactggtg atgacaatgc acttcaacaa acatttattg acgcaaatata tgctgcttct 1380
440 caattcggac agacattagg aagcgtatta gatgtatatg cagaattcgc tagacaaggt 1440
442 gttaaaggta atgagttatc tcaattctca aatgcagcat taattgctgc taacgttggt 1500
444 gagattgacg ctaaacagc ttctgaatat ttaacttcta tgtctgctca gtgggaaacg 1560
446 actggaacc aagctatgag acaagttgac tcaactcaac aagtttccaa taaatattgct 1620
448 acaactgttg aaaagttagc acaaggtcaa gcaaaagctg gctctactgc taaatcaatg 1680
450 ggacttactt ttgatgaac taatggtatt attggtgcat taacagctaa gactaagcaa 1740
452 tctggggacg aaattggtaa ctttatgaaa gccactttac ctaaaactta tagtggtaaa 1800

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/551,492

DATE: 07/25/2006

TIME: 15:59:21

Input Set : N:\AMC\551492.txt

Output Set: N:\CRF4\07252006\J551492.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number